What is claimed is:

1. A pharmaceutical composition comprising a therapeutic quantity of a COX-2 inhibitor having an IC50-WHMA COX-2/COX-1 ratio ranging from about 0.23 to about 3.33 with reduced gastrointestinal and cardiovascular toxicity.

2. The Pharmaceutical composition of claim 1, wherein the COX-2 inhibitor comprises a botanical COX-2 inhibitor.

3. The pharmaceutical composition of claim 1, wherein the COX-2 inhibitor comprises iso-alpha acids.

4. The pharmaceutical composition of claim 3, wherein the iso-alpha acids are obtained from a supercritical carbon dioxide extraction of whole hops.

5. The therapeutic composition of claim 1, wherein the dose of the COX-2 inhibitor ranges from about 5 mg. to about 1,000 mg. per day.

6. The pharmaceutical composition of claim 3, wherein the dose of the iso-alpha acids is 100 mg. to about 1,000 mg. per day.

7. The pharmaceutical composition of claim 6 wherein the dose of iso-alpha acids is 200 mg. to 600 mg.

8. The pharmaceutical composition of claim 1, further comprising a mineral salt or alkali earth salt, or a mineral carbonate.

9. The pharmaceutical composition of claim 3, further comprising a mineral salt or alkali earth salt or mineral carbonate.

10. The pharmaceutical composition of claim 9, wherein the mineral salt or alkali earth salt is potassium hydroxide

~~10~~ 11. The pharmaceutical composition of claim 10, wherein the amount of potassium hydroxide per dose is 25 mg. to 500 mg.

~~11~~ 12. A method for the treatment, of pain in mammals comprising:

selecting the pharmaceutical composition of claim 1; and

administering a therapeutically effective amount of the pharmaceutical composition to a mammal in need thereof.

~~12~~ 13. A method for treating osteoarthritis, rheumatoid arthritis or acute pain comprising:

selecting the pharmaceutical composition of claim 1; and

administering a therapeutically effective amount of the pharmaceutical composition in need thereof.

~~13~~ 14. The method of claim ~~11~~ 12, wherein the COX-2 inhibitor comprises a botanical COX-2 inhibitor.

~~14~~ 15. The method of claim ~~12~~ 13, wherein the COX-2 inhibitor comprises a botanical COX-2 inhibitor.

~~15~~ 16. The method of claim ~~11~~ 12, wherein the COX-2 inhibitor comprises iso-alpha acids.

~~16~~ 17. The method of claim ~~12~~ 13, wherein the COX-2 inhibitor comprises iso-alpha acids.

~~17.~~ 18 The pharmaceutical composition of claim 1, wherein the ingredients are in sustained-release or immediate-release form, or a blend of sustained-release and immediate-release.

~~18.~~ 19 The pharmaceutical composition of claim ~~17~~ 18, wherein the sustained-release form comprises: algal polysaccharides, chitosan, pectin, glucomannan, guar gum, xanthan gum, gum arabic, gum karaya, locust bean gum, keratin, laminaran, carrageenan, cellulose, modified cellulosic substances such as cellulose ether derivatives; methylcellulose, hydroxypropylmethylcellulose, hydroxypropylcellulose, hydroxyethylcellulose, sodiumcarboxymethylcellulose, carboxymethylcellulose carboxypolymethylene, acrylic resin polymers, polyacrylic acid and homologues, polyethylene glycol, polyethylene oxide, polyhydroxylalkyl methacrylate, polyvinylpyrollidine, polyacrylamide, agar, zein, stearic acid, hydrogenated vegetable oils, carnauba wax, or gelatin.

20 ~~19~~. The pharmaceutical composition of claim 1, wherein the pharmaceutical composition comprises an oral dosage forms that comprises tablets, hard shell capsules, soft gelatin capsules, beads, granules, aggregates, powders, gels, solids, semi-solids, or suspensions.

21 ~~20~~. The pharmaceutical composition of claim 1, wherein the pharmaceutical composition comprises a ~~topical~~ dosage form that comprises lotions, transdermal delivery systems, ~~including~~ dermal patches, aerosols, nasal mists, suppositories, salves or ointments.

~~22~~ 21. A method of producing an analgesic effect with reduced gastrointestinal and cardiovascular toxicity in a mammal comprising administering to said mammal a therapeutically effective analgesic amount of a COX-2 inhibitor having an IC50-WHMA COX-2/COX-1 ratio ranging from about 0.23 to about 3.33.

22. The method of claim 21, wherein the COX-2 inhibitor is from a botanical source.

23. The method of claim 22, wherein the COX-2 inhibitor is iso-alpha acids.

24. The method of claim 23, further comprising a mineral salt or alkali earth salt or mineral carbonate.

25. The method of claim 24, wherein the mineral salt is potassium hydroxide.

26. A method for producing a fast onset of pain relief in a mammal comprising administering to a mammal a therapeutically effective analgesic amount of iso-alpha acids.